SECTION I.
ECONOMIC THEORY, MACRO- AND REGIONAL ECONOMY

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ASSOCIATION RULES IN FINANCE MANAGEMENT

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Association rules allow financial managers to find patterns between related events [1]. These algorithms are used in the financial sector [2], especially in the field of finance management.

First of all, algorithms of association rules allow firms or shops to analyze the consumer basket. This analysis helps to identify the basic needs of the store's or firm’s customer and direct consumer marketing to a specific set of customers, whose consumer basket is the largest. In addition, the marketing proposals will relate to specific products included in the customer's consumer basket. Thus, firms and stores can save large amounts of money on advertisement and increase the profitability of their activity [3].

Moreover, a similar method is actively used to segment bank customers into groups, according to their preferences. After that, the bank's financial employees need to develop different marketing strategies for different groups of clients in order to achieve the greatest attraction of new clients and thereby increase the income of bank institution [4; 5].

Association rules are also used to detect financial fraud. This can be achieved, for example in the insurance industry, by combining the same claims for insurance payments, especially when the amount is high enough to characterize the relationship between doctors, lawyers and client, who is an owner of an insurance policy. And, for example, in the banking sector, by analyzing past transactions that turned out to be fraudulent, financial managers can identify credit card fraud and thereby increase the efficiency of management of finance [6; 7].

With the help of association rules, financial managers in the stock market are able to predict future price changes for financial instruments by using the association rules search algorithm called Apriori, assess risks, predict the onset of critical moments, and alsoto choose the most profitable market instruments. The Apriori algorithm is trained on real statistical data (changes in securities quotes) [8-10].

Thus, using the algorithm for identifying association rules, financial managers are able to solve a fairly wide range of practical problems in the field of finance.

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